

WHAT IS CLAIMED IS:

1. A nucleic material, in an isolated or purified state, comprising a nucleotide sequence selected from the group consisting of sequences of SEQ ID NOs: 1 to 15, their complementary sequences, and sequences that exhibit for every sequence of 100 contiguous monomers at least 70% homology with said sequences of SEQ ID NOs: 1 to 15, respectively.

2. A nucleic material, in an isolated or purified state, comprising a nucleotide sequence, encoding any polypeptide exhibiting, for every contiguous sequence of at least 30 amino acids, at least 80% identity with a peptide sequence encoded by at least a functional part of a nucleotide sequence selected from the group consisting of sequences of SEQ ID NOs: 1 to 15 and their complementary sequences.

3. The nucleic material according to claim 1, comprising a nucleic fragment inserted between two sequences corresponding respectively to the LTR region and to the gag gene for a retroviral genomic structure.

4. A nucleic material consisting of a nucleotide sequence identical to SEQ ID NO: 11, with at least one deletion.

5. A nucleic material according to claim 1, comprising at least one functional nucleotide sequence encoding at least one retroviral protein.

6. A nucleic material according to claim 1, comprising at least one regulatory nucleotide sequence.

7. A nucleotide fragment comprising a nucleotide sequence selected from the group consisting of:

(a) a nucleotide sequence of at least 100 bases of a clone selected from the group consisting of:

cl.6A2 (SEQ ID NO: 1),

cl.6A1 (SEQ ID NO: 2),
cl.7A16 (SEQ ID NO: 3),
cl.Pi22 (SEQ ID NO: 4),
cl.24.4 (SEQ ID NO: 5),
cl.C4C5 (SEQ ID NO: 6),
cl.PH74 (SEQ ID NO: 7),
cl.PH7 (SEQ ID NO: 8),
cl.Pi5T (SEQ ID NO: 9),
cl.44.4 (SEQ ID NO: 10),
HERV-W (SEQ ID NO: 11),
cl.6A5 (SEQ ID NO: 12),
cl.7A20 (SEQ ID NO: 13),
cl.7A21 (SEQ ID NO: 14), and
LTR (SEQ ID NO: 15);

(b) sequences which are respectively complementary to the sequences according to (a); and

(c) equivalent sequences which have respectively at least 50% homology to the sequences according to (a) and (b).

8. A nucleic probe for the detection of a nucleic material, wherein said nucleic probe hybridizes under highly stringent conditions with the nucleotide sequence of the nucleic material according to claim 1.

9. A probe according to claim 8, comprising a label.

10. A nucleic primer for the amplification by polymerization of an RNA or of a DNA, comprising a nucleotide sequence that hybridizes under highly stringent conditions with the nucleotide sequence of the nucleic material according to claim 1.

11. A nucleic probe or nucleic primer, comprising a nucleotide sequence selected from the group consisting of SEQ ID NOs: 16 to 28.

12. An RNA or DNA, comprising a nucleotide fragment according to claim 7.

13. The nucleic probe according to claim 8, wherein said probe contains at least 6 monomers.

14. The nucleic probe according to claim 13, wherein said probe contains no more than 100 monomers.

15. The nucleic probe according to claim 13, wherein said probe contains at least 6 contiguous monomers of a sequence selected from the group consisting of SEQ ID NOs: 1-15 and their complementary sequences.

16. The nucleic probe according to claim 8, wherein said probe has at least 70% homology with a sequence selected from the group consisting of SEQ ID NOs: 1-15 and their complementary sequences.

17. The nucleic probe according to claim 16, wherein said probe has at least 90% homology with a sequence selected from the group consisting of SEQ ID NOs: 1-15 and their complementary sequences.

18. A method for the molecular labeling of at least one member selected from the group consisting of an autoimmune disease, a pathology associated with an autoimmune disease, a pathological pregnancy, and an unsuccessful pregnancy, said method comprising:
at least one of identifying and quantifying any nucleotide fragment according to claim 7 in any biological body material.

19. The method according to claim 18, further comprising:
detecting cells expressing the nucleotide fragment in said biological body material.
20. A diagnostic composition comprising a nucleic material according to claim 1.
21. A method of diagnosing an autoimmune disease, a pathology associated with an autoimmune disease, a pathological pregnancy, or an unsuccessful pregnancy, said method comprising:
obtaining a biological sample;
contacting said biological sample with a molecular marker comprising a nucleic material according to claim 1; and
detecting for said molecular marker.
22. A method of diagnosing susceptibility to an autoimmune disease or a pathology associated with an autoimmune disease, a risk of a pathological pregnancy, or a risk of an unsuccessful pregnancy, said method comprising:
obtaining a biological sample;
contacting said biological sample with a chromosomal marker comprising a nucleic material according to claim 1; and
detecting for said chromosomal marker.
23. A method of detecting a gene associated with susceptibility to an autoimmune disease or a pathology associated with an autoimmune disease, a risk of a pathological pregnancy, or a risk of an unsuccessful pregnancy, said method comprising:
obtaining a biological sample;
contacting said biological sample with a proximity marker comprising a nucleic material according to claim 1; and

detecting for said proximity marker.

24. The method of claim 18, wherein said biological body material comprises a body fluid.

25. The nucleic material according to claim 1, wherein said nucleotide sequence exhibits, for every sequence of 100 contiguous monomers, at least 90% homology with said sequences of SEQ ID NOs: 1 to 15, respectively.

26. The nucleic material according to claim 2, wherein said polypeptide exhibits, for every contiguous sequence of at least 30 amino acids, at least 90% identity with a peptide sequence capable of being encoded by at least a functional part of said nucleotide sequence selected from the group consisting of sequences of SEQ ID NOs: 1-15 and their complementary sequences.

27. The nucleic material of the retroviral genomic type according to claim 2, comprising a nucleic fragment inserted between two sequences corresponding respectively to the LTR region and to the gag gene for said retroviral genomic structure.

28. The nucleic material according to claim 27, wherein said nucleic fragment comprises the sequence of SEQ ID NO: 12.

29. The nucleic material according to claim 3, wherein said nucleic fragment comprises the sequence of SEQ ID NO: 12.

30. The nucleic material according to claim 4, wherein said nucleotide sequence comprises a sequence selected from the group consisting of the sequences of SEQ ID NOs: 7, 8 and 9.

31. The nucleic material according to claim 4, comprising at least one functional nucleotide sequence encoding at least one retroviral protein.

32. The nucleic material according to claim 4, comprising at least one regulatory nucleotide sequence.
33. A replication vector, comprising a nucleotide fragment according to claim 7.
34. A nucleotide fragment according to claim 7, wherein said equivalent sequences exhibit at least 70% homology with the sequences according to (a) and (b).
35. A nucleotide fragment according to claim 7, wherein said equivalent sequences exhibit at least 90% homology with the sequences according to (a) and (b).